

AMENDMENTS TO THE CLAIMS

Please cancel Claims 1 and 3-13.

LISTING OF CLAIMS

1.-13. (Cancelled)

14. (Previously Presented) A method for applying an update to a navigation database, comprising:

receiving an update instruction specifying two nodes and a link, where the nodes represent road intersections and the link represents a road segment interconnecting the two nodes;

identifying an existing node in the navigation database which corresponds to at least one of the specified nodes using a logical pattern matching operation by constructing a graph with a structure representative of the road topology in the vicinity of at least one of the specified nodes and comparing the graph to a logical representation of the navigational database;

classifying each of the specified nodes based on its relation to at least one of an existing node or an existing link in the navigation database; and

applying the update instruction in accordance with an ordered operations rule set.

15. (Cancelled)

16. (Previously Presented) The method of Claim 14 where the step of comparing the graph to the logical representation further comprises performing a minimum spanning tree matching operation, where the graph is defined as a tree graph and the at least one specified node serves as a root node for the tree graph.

17. (Previously Presented) The method of Claim 14 where the step of comparing the graph to the logical representation further comprises performing an all spanning tree matching operation, where the graph is defined as a tree graph and the at least one specified node serves as a root node for the tree graph.

18. (Original) The method of Claim 14 wherein the step of classifying each of the specified nodes further comprises categorizing a specified node as one of the group consisting of: a node corresponding to an existing node in the navigation database, a point on an existing link in the navigation database, a not-yet-existing element in the navigation database.

19. (Original) The method of Claim 14 wherein the ordered operations rule set specifies that a link having two nodes which correlate to existing nodes in the navigation database can be added to the navigation database.

20. (Original) The method of Claim 14 wherein the ordered operations rule set specifies that a link having a node which is a point on an existing link in the

navigation database is added by deleting said existing link and adding two links interconnecting said node to other existing nodes in the navigation database.

21. (Original) The method of Claim 14 wherein the ordered operations rule set specifies a link having two nodes where neither node correlates to an existing node in the navigation data is not be added to the navigation database.

22. (Original) The method of Claim 14 wherein application of the update instruction is delayed in accordance with the ordered operations rule set until a subsequent update instruction is applied to the navigation database.

23. (Previously Presented) A method for generating a database renewal for a navigation database, comprising:

providing a list of links to be updated in the navigation database, where each link is represented as two road intersections interconnected by a road segment;

constructing a logical representation for each road intersection uniquely specified in the list of links, such that the logical representation is indicative of the road topology in the vicinity of specified road intersection by building a graph with a structure representing the road topology in the vicinity of the at least one road intersection, where nodes of the graph represent road intersections and links of the graph represent road segments; and

formulating an ordered set of update instructions for the list of links to be updated in the navigation database, such that each update instruction references at least one logical representation.

24. (Previously Presented) The method of Claim 23 further comprising compiling each of the logical representations and the ordered set of update instruction to form a database renewal.

25. (Previously Presented) The method of Claim 23 further comprising identifying attribute data associated with either road segments or road intersections specified in the list of links, and formulating the ordered set of update instructions, such that at least one update instruction references the attribute data.

26. (Cancelled)